

REMARKS

Reconsideration and allowance of the subject patent application are respectfully requested.

The Abstract has been amended to be in a more traditional U.S. format.

The specification has been amended to correct minor informalities and entry of these amendments is respectfully requested.

The claims were rejected under 35 U.S.C. Section 112, second paragraph, as allegedly being indefinite for containing grammatical and idiomatic errors and for using redundant terms. The claims have been amended and withdrawal of the Section 112, second paragraph, rejection is respectfully requested.

Claims 1-3, 5-8, 10, 11 and 14 were rejected under 35 U.S.C Section 102(b) as allegedly being "anticipated" by Shaffer (EP 0 848 560). For the reasons set forth below, Applicants traverse this rejection.

Independent claim 1 of the subject patent application describes, among other things, storing connection information into a connection information storage section based on a condition of communication connection of a communication apparatus and an information server in a first communication mode at a time of switching from the first communication mode to a second communication mode, and then, after a connection with the information server is established in the second communication mode, restoring the condition of communication connection based on the stored connection information. No such operation is disclosed in Shaffer.

Shaffer discloses a method and system for managing the routing of communications data, such as real-time multimedia exchanges between remote sites. The Shaffer method and system provide for continuous monitoring of communication modes and for "in-session" switching between modes. The in-session switching occurs in response to detecting a condition in which an alternative mode provides a higher present-time quality of service (QoS) at a session tariff no greater than a calculated acceptable session tariff. As described in Shaffer:

Because the previously selected mode, i.e., the Frame relay connection, no longer provides the required QoS, the system switches from this mode. In Fig. 3, a decision is executed at step 84 as to whether the selected mode still has the highest quality of service at the acceptable session tariff defined in step 60. If this

query results in a positive response, the process returns to step 78. On the other hand, if the response is negative, such as the situation of table 4, a step 86 of switching to an alternative mode is executed. Col. 10, lines 37-46.

Shaffer also notes that the in-session switching operation may factor in cost. *See* col. 11, line 14 *et seq.*

As noted above, there is no disclosure in Shaffer of storing connection information and restoring a condition of communication connection based on the stored connection information as claimed. The office action references col. 6, line 56 to col. 7, line 1 and col. lines 20-28 of Shaffer as allegedly disclosing this feature.

The first referenced portion of Shaffer describes a memory 32 that stores pre-established guaranteed QoS parameter values for various communication modes. However, these guaranteed QoS parameters do not constitute the claimed connection information because, among other things, these “pre-established” values are not stored based on a condition of communication connection of a communication apparatus and an information server at a time of communication mode switching.

The second referenced portion of Shaffer describes a tariff table which stores identification of the costs of utilizing the different modes available to the integrated network. The tariffs in the tariff table are not based on a condition of a communication connection at the time of communication mode switching, nor are the tariffs used to restore the condition of the communication connection as claimed.

Because of the above-noted deficiencies of Shaffer, Applicant respectfully submits that Shaffer cannot anticipate the subject matter of claim 1 and those claims that depend therefrom.

Independent claim 10 is directed to a communication apparatus which includes a communication mode switching control section which monitors a rate of information transfer from an information server and compares the monitored information transfer rate and a reference value. In cases in which the monitored information transfer rate does not exceed the reference value, connection information is stored in a connection information storage section based on a condition of communication connection of the communication apparatus and the information server at that time, the communication in the first communication mode is disconnected, a connection with the information server in the second communication mode is established, and the communication connection condition is restored based on the stored connection information.

Here again, Shaffer does not disclose the storing of connection information based on a condition of communication connection or the restoring of the communication connection condition based on this stored connection information. As such, Applicants respectfully submit that Shaffer does not anticipate claim 10.

Claim 11 is directed to a communication system including an information server and a communication apparatus. The information server includes communication circuitry that sends a communication mode switching instruction to the communication apparatus if an information transfer rate does not exceed a reference value. The communication apparatus switches communication modes based on receipt of this instruction. Applicants find no disclosure whatsoever in Shaffer of an information server sending a communication mode switching instruction to a communication apparatus. In Shaffer, the in-session switching is based on monitoring of QoS and optionally cost. There is no disclosure of the switching being based on receipt of a switching instruction from an information server. As such, Shaffer cannot anticipate claim 11.

The office action references col. 6, lines 18-55 of Shaffer as allegedly disclosing this feature. However, this portion of Shaffer simply provides details relating to QoS. There is no disclosure here of switching communication modes based on a signal received from an information server as claimed.

In addition, claim 11 calls for the storing of connection information based on a condition of communication connection and the restoring of the communication connection condition based on this stored connection information. As discussed above, these features are not disclosed in Shaffer. Thus, for this additional and independent reason, Shaffer does not anticipate claim 11.

The dependent claims 2, 3, 5-8 and 14 are believed to be allowable because of their respective dependencies and because of the additional patentable features recited therein.

By way of illustration, claim 2 calls for the switching determination to be based on a comparison between a reference value and an amount of information to be acquired from the information server. Shaffer does not disclose this concept. The office action references col. 8, lines 3-22 and 37-45 of Shaffer in connection with claim 2. However, these portions of Shaffer relate to QoS and tariffs. There is no disclosure or even suggestion that switching of

communication modes be based on whether an amount of information to be acquired exceeds a reference value. For this additional and independent reason, claim 2 is believed to be allowable.

By way of further illustration, claim 7 calls for the switching determination to be based on an instruction received from an information server. As noted above in the discussion of claim 11, Shaffer does not disclose this feature. For this additional and independent reason, Shaffer does not anticipate claim 7 (or claim 8 which depends from claim 7).

Claim 4 was rejected under 35 U.S.C. Section 103(a) as allegedly being "obvious" over Shaffer in view of Kunz (U.S. Patent No. 6,223,221). Kunz is referenced in the office action as disclosing the measuring of download and connection time to perform a certain task. While not conceding, among other things, the propriety of the proposed combination, Kunz does not remedy the deficiencies of Shaffer in connection with claim 1 (from which claim 4 depends). As such, even if these documents were combined as proposed, the subject matter of claim 4 would not result.

Claim 9 was rejected under 35 U.S.C. Section 103(a) as allegedly being "obvious" over Shaffer in view of Watson (U.S. Patent No. 6,631,409). Watson is referenced in the office action as disclosing the overriding default settings. While not conceding, among other things, the propriety of the proposed combination, Watson does not remedy the deficiencies of Shaffer in connection with claim 1 (from which claim 9 depends). As such, even if these documents were combined as proposed, the subject matter of claim 9 would not result.

Claims 12 and 13 were rejected under 35 U.S.C. Section 103(a) as allegedly being "obvious" over Shaffer in view of Davis (U.S. Patent No. 5,583,922). Davis is referenced in the office action as disclosing switching back to voice mode once data transmission is completed. While not conceding, among other things, the propriety of the proposed combination, Davis does not remedy the deficiencies of Shaffer in connection with claim 1 (from which claims 12 and 13 each depends). As such, even if these documents were combined as proposed, the subject matter of claims 12 and 13 would not result.

New claims 15-23 have been added. The subject matter of these new claims is fully supported by the illustrative example embodiments described in the original disclosure and no new matter is added.

Claim 15 is directed to a communication apparatus including a communication mode switching control section for controlling the switching of communication modes with an

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information server by storing connection information into a storage section based on a communication connection condition of the communication apparatus and the information server in a current communication mode, releasing the communication connection with the information server, establishing a communication connection with the information server in another communication mode, and restoring the communication connection condition based on the stored connection information. For reasons along the lines advanced above, the applied documents do not disclose or suggest such a communication apparatus. As such, claim 15 and its dependent claims 16-23 are believed to be allowable.

The pending claims are believed to be allowable and favorable office action is respectfully requested.

Respectfully submitted,

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